Tentatively Selected Plan (TSP)
Corps Study Process

Scoping
- Data gathering
- Request public input on study area issues for consideration

Alternative Evaluation & Analysis
- Evaluate alternatives
- Recommend a plan
- Draft report / National Environmental Policy Act (NEPA) document
- Opportunity for public review & comment

Feasibility Analysis of Selected Plan
- Finalize report and release for public review

Final Report
- Send final report to Congress for approval and funding

Current Stage
Environmental and Cultural Resources Status

**Scoping**
- Public input on study area problems and issues for further consideration
- Data gathering
- Environmental coordination began

**Resources Analyzed for Impacts**
- Navigation and Economic Conditions
- Hydraulics and Geomorphology
- Water Quality
- Air Quality
- Greenhouse Gas Emissions
- Sea Level Change
- Underwater Noise
- Hazardous, Toxic, and Radiological Waste
- Benthic Organisms
- Fish
- Wildlife
- Threatened and Endangered Species
- Cultural Resources
- Public Health and Safety

**Current Status**
- Draft Feasibility Report and Environmental Assessment (FR/EA) released for public review & comment
- State Historic Preservation Office (SHPO) Section 106 consultation letter sent
- Tribal project notification letters sent
- SHPO concurrence on area of potential effect and finding of No Historic Properties Affected
- Fish and Wildlife Coordination Act Planning Aid Letter received
- Submit Biological Assessment early 2020

**Future Steps**
- Review and incorporate comments received during public review into final FR/EA
- Final FR/EA released
- Seek a Water Quality Certification and Coastal Zone Management Act consistency determination concurrence from WA Department of Ecology
- Full sediment characterization with archaeological monitoring
- Complete Endangered Species Act consultation
Vessel Size Progression

- **Post-Panamax:** 136'
- **10K TEU Ships:** 150'
- **18K TEU Ships:** 193'
  
  - 14,000 TEU ship draft: 51'
  - 18,000 TEU ship draft: 52.5'
### National Transportation Cost Savings Benefits

- Channel deepening allows larger vessels to load more cargo per trip, leading to fewer required trips to transport the same volume of cargo (*national transportation cost savings benefits*).
- The study recommends the plan which maximizes net transportation cost savings benefits (benefits minus channel deepening costs) = -57’ MLLW.

#### Anticipated Vessel Calls

<table>
<thead>
<tr>
<th>Year</th>
<th>2035 Projected Calls</th>
<th>No Action (-51 MLLW)</th>
<th>-52 MLLW</th>
<th>-53 MLLW</th>
<th>-54 MLLW</th>
<th>-55 MLLW</th>
<th>-56 MLLW</th>
<th>-57 MLLW</th>
<th>-58 MLLW</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>591</td>
<td>565</td>
<td>539</td>
<td>513</td>
<td>485</td>
<td>457</td>
<td>425</td>
<td>425</td>
</tr>
</tbody>
</table>

#### Average Annual Equivalent (AAEQ) Costs/Benefits ($Millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>2035 Projected Calls</th>
<th>No Action (-51 MLLW)</th>
<th>-52 MLLW</th>
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<td>513</td>
<td>485</td>
<td>457</td>
<td>425</td>
<td>425</td>
</tr>
</tbody>
</table>

#### AAEQ Benefits
- No Action (-51 MLLW): 0
- -52 MLLW: $25,158,000
- -53 MLLW: $48,687,000
- -54 MLLW: $70,573,000
- -55 MLLW: $93,227,000
- -56 MLLW: $114,762,000
- -57 MLLW: $136,195,000
- -58 MLLW: $136,195,000

#### AAEQ Costs
- No Action (-51 MLLW): 0
- -52 MLLW: $5,373,000
- -53 MLLW: $6,525,000
- -54 MLLW: $7,216,000
- -55 MLLW: $12,069,000
- -56 MLLW: $12,837,000
- -57 MLLW: $13,634,000
- -58 MLLW: $14,665,000

#### Net AAEQ Benefits
- No Action (-51 MLLW): 0
- -52 MLLW: $19,785,000
- -53 MLLW: $42,161,000
- -54 MLLW: $63,357,000
- -55 MLLW: $81,159,000
- -56 MLLW: $101,926,000
- -57 MLLW: $122,561,000
- -58 MLLW: $121,530,000

#### Total Costs
- No Action (-51 MLLW): 0
- -52 MLLW: $141,507,000
- -53 MLLW: $172,623,000
- -54 MLLW: $191,256,000
- -55 MLLW: $322,273,000
- -56 MLLW: $343,013,000
- -57 MLLW: $364,523,000
- -58 MLLW: $392,356,000
**Dredged Material Evaluation and Results**

_Suitability_ refers to whether dredged material is acceptable for placement at a specific location. The study is evaluating suitability for in-water, upland, and beneficial use disposal; Material unsuitable for in-water disposal will be disposed of in an appropriate upland facility.

- Conducted feasibility-level sediment sampling (25 cores) and partial Dredged Material Management Program (DMMP) testing (63 analyses) in Feb-June 2019.
- The majority of sediment below -54 ft MLLW is clean native material.
- Confirmed majority of material is suitable for in-water disposal and/or beneficial use at Saltchuk disposal site.
- Evaluation of beneficial use at Saltchuk disposal site is ongoing; material not suitable for disposal at Saltchuk, but suitable for in-water disposal, will be placed at the DMMP disposal site.
- Full DMMP testing and suitability determination will be completed prior to dredging during Pre-construction Engineering and Design (PED) phase.

### ESTIMATED DISPOSAL VOLUMES

<table>
<thead>
<tr>
<th>Source</th>
<th>Total Volume</th>
<th>DMMP disposal site</th>
<th>Upland facility</th>
<th>Saltchuk disposal site</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Economic Development (NED) Plan (-57 ft MLLW)</td>
<td>2,803,000 CY</td>
<td>Up to 2,412,000 CY</td>
<td>392,000 CY</td>
<td>Up to 1,850,000 CY</td>
</tr>
</tbody>
</table>

### SUITABILITY

- **Non-Native**
  - DMMP disposal site: ~90% suitable
  - Saltchuk site: ~85% suitable
- **Native**
  - DMMP disposal site: ~95% suitable
  - Saltchuk disposal site: ~95% suitable
Proposed Scenarios

Evaluation of disposal at the Saltchuk site for beneficial use is ongoing. The Corps will complete evaluation to determine a recommended disposal plan during the feasibility study. The recommended plan will be included in the final Feasibility Report/Environmental Assessment.

Proposed Saltchuk Beneficial Use Scenarios & Cost Effectiveness Analysis

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Incremental Project First Cost over Base Plan ($1000)</th>
<th>Cost (AAEQ Cost in $1000)</th>
<th>Benefit (Net AAHU Gain)</th>
<th>Average Cost ($1000/AAHUs)</th>
<th>Cost Effective? / Best Buy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No Action</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>Yes / Yes</td>
</tr>
<tr>
<td>B</td>
<td>Bench 1</td>
<td>$1,240</td>
<td>$48</td>
<td>0.4</td>
<td>$120</td>
<td>Yes / No</td>
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<tr>
<td>C</td>
<td>Benches 1 and 2</td>
<td>$2,352</td>
<td>$91</td>
<td>3.6</td>
<td>$25</td>
<td>Yes / No</td>
</tr>
<tr>
<td>D</td>
<td>Benches 1, 2 and 3</td>
<td>$2,839</td>
<td>$110</td>
<td>4.9</td>
<td>$22</td>
<td>Yes / Yes</td>
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<tr>
<td>E</td>
<td>All benches and islands</td>
<td>$10,631</td>
<td>$410</td>
<td>14.5</td>
<td>$28</td>
<td>Yes / Yes</td>
</tr>
</tbody>
</table>

CE/ICA = cost effectiveness and incremental cost analysis; AAEQ = average annual equivalent; AAHUs = average annual habitat units, also referred to as benefits or outputs.
Final Array of Alternatives

- Alternative 1 – No Action (current depth: -51 ft., MLLW)
- Alt. 2 – Blair Waterway Deepening (up to -58 ft., MLLW)
- Alt. 2a – Blair Waterway Deepening through Husky Terminal (-58 ft., MLLW)
- Alt. 2b – Blair Waterway (NED) Deepening (-57 ft., MLLW)
How to Submit Comments:

**Verbal Comments**

- Please sign-in to submit a verbal comment at this event
- Verbal comments are limited to 3 minutes per person
- Verbal comments will be recorded for the formal record and printed in the final report

**Written Comments**

- Written comments are also welcome today
  - Comment cards are in the back of the room
  - Comments can also be submitted via email
    - TacomaHarbor@usace.army.mil
  - Comments are also accepted through the mail:
    - U.S. Army Corps of Engineers
    - ATTN: CENWS-PMP
    - P.O. Box 3755
    - Seattle, WA 98124

Comment Period: 18 December 2019 – 16 February 2020